

REMARKS

Reconsideration of the present application is respectfully requested.

The invention relates to a tire carcass having reinforcement 5, which comprises a group of filaments, e.g., first and second filaments shown in the embodiment of Fig. 2. At the level of the crown and the sidewalls, each filament forms a series of transverse portions extending from one tire bead 4 to the other. At the level of the beads, each filament forms U-shaped connections joining two successive transverse portions of the respective filament. Between the crown and the bead, adjacent portions of both of the first and second filaments extend along parallel paths (i.e., in region A-B of Fig. 2, both of the filaments extend along paths parallel to line 16).

The above-described tire structure is recited in claim 1, which stands rejected as anticipated by any of Ueyoko, Pouilloux, and Ogawa.

Ueyoko and Pouilloux disclose a conventional way of making a tire wherein a reinforced carcass portion, formed initially on a cylindrical drum, is subjected to a shaping step wherein it is given a torroidal profile. While on the drum, reinforcing filaments of the carcass reinforcement are all parallel. During the shaping step, the axial extremities of the filaments are displaced to a smaller diameter. That causes the adjacent portions of each filament to be displaced differently from one another along their axial lengths, so as to become progressively divergent from one another from the bead region toward the crown region, i.e., the parallel relationship is eliminated. That means that in Pouilloux, Figs. 3 and 4, and Uiyoko, Figs. 15 and 16, the filaments are shown prior to the shaping step (i.e., no tire has yet been formed). After the shaping step and in the formed tire, the parallel relationship

shown in those figures will have been eliminated, in contrast to the presently claimed invention.

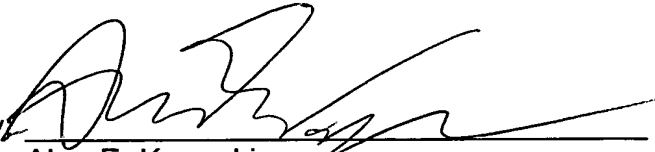
Similarly, in Ogawa, a realistic non-parallel relationship between the adjacent portions of the filaments is accurately shown in Figs. 4 and 8.

The tire according to the presently claimed invention has been made directly on a torroidal drum, i.e., a one-step manufacturing process (see Figs. 13a-13d). Consequently, the claimed parallel relationship between adjacent portions of all filaments can be achieved, e.g., in the region A-B of Fig. 2, in the tire that is formed. The presently claimed tire structure makes it possible to arrange the filaments very close to one another, thus increasing the cord density. This has a beneficial effect on a number of mechanical properties, e.g., it may make it possible to increase the modulus and the tensile strength.

In light of the foregoing, it is submitted that the claims distinguish patentably over the applied prior art, and that the application is in condition for allowance.

Respectfully submitted,

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